IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-48. (Canceled)

49.   (Currently Amended) A method of operating on data on a computer system, comprising:

providing at least one user-defined grouping rule for grouping numerical data tabulated in a multi-dimensional data set into a user-definable number of groups; and

applying at least one of the grouping rules to the numerical data;

wherein the at least one grouping rule defines at least one breakpoint corresponding to the user-definable number of groups, the at least one breakpoint defining numeric ranges of said numerical data, and wherein application of the at least one rule to the numerical data divides the data into groups based on the at least one breakpoint to reduce the resolution of the numerical data wherein the grouping of the data is visualized by associating colors to the data groups tabulated in the multi-dimensional data set.

50.   (Previously Presented) A method as in claim 49, wherein the data are provided in a table and wherein the at least one grouping rule applies to at least one user-selectable column of the table.

51.   (Previously Presented) A method as in claim 49, further comprising:

presenting the grouped data in a manner that visually distinguishes the groups.

52.   (Previously Presented) A method as in claim 51, wherein the grouping rules associate colors with groups and wherein the presenting of the grouped data further comprises:

coloring an aspect of the data according to the rules.

53.   (Previously Presented) A method as in claim 51, wherein the data are in labeled columns in a spreadsheet, and wherein the at least one grouping rule specifies at least

one breakpoint and a corresponding color for each at least one breakpoint, and wherein the presenting of the grouped data comprises:

coloring each data item in the at least one labeled column of the data based on the at least one breakpoint and the corresponding color of the at least one breakpoint.

54.   (Previously Presented) A method as in claim 49, further comprising providing a rule for grouping textual data, the rule defining at least one breakpoint based on textual values.

55.   (Previously Presented) A method as in claim 49, wherein the at least one breakpoint is determined automatically based on the data.

56.   (Previously Presented) A method as in claim 52, wherein the data are provided in a table, wherein the coloring of an aspect of the data comprises:

coloring backgrounds of table cells according to the rules.

57.   (Previously Presented) A method as in claim 49, wherein the number of groups is fewer than a number of possible data values.

58.   (Currently Amended) A computer system for operating on data, the system comprising:

a mechanism constructed and adapted to provide at least one user-defined grouping rule for grouping numerical data tabulated in a multi-dimensional data set into a user-definable number of groups; and

a mechanism constructed and adapted to apply at least one of the grouping rules to the numerical data;

wherein the at least one grouping rule defines at least one breakpoint corresponding to the user-definable number of groups, the at least one breakpoint defining numeric ranges of said numerical data, and wherein application of the at least one rule to the numerical data divides the data into groups based on the at least one breakpoint to reduce the resolution of the numerical data, wherein the grouping of the data is visualized by associating colors to the data groups tabulated in the multi-dimensional data set.

59.   (Previously Presented) A system as in claim 58, wherein the data are provided in a table and wherein the at least one grouping rule applies to at least one user-selectable column of the table.

60.   (Previously Presented) A system as in claim 58, further comprising:

a mechanism constructed and adapted to present the grouped data in a manner that visually distinguishes the groups.

61.   (Previously Presented) A system as in claim 60, wherein the grouping rules associate colors with groups and wherein the mechanism constructed and adapted to present the grouped data further comprises:

a mechanism constructed and adapted to color an aspect of the data according to the rules.

62.   (Previously Presented) A system as in claim 60, wherein the data are in labeled columns in a spreadsheet, and wherein the at least one grouping rule specifies at least one breakpoint and a corresponding color for each at least one breakpoint, and wherein the mechanism constructed and adapted to present the grouped data comprises:

a mechanism constructed and adapted to color each data item in the at least one labeled column of the data based on the at least one breakpoint and the corresponding color of the at least one breakpoint.

63.   (Previously Presented) A system as in claim 58, further comprising providing a rule for grouping textual data, the rule defining at least one breakpoint based on textual values.

64.   (Previously Presented) A system as in claim 58, further comprising:

a mechanism constructed and adapted to determine at least one breakpoint automatically, based on the data.

65.   (Previously Presented) A system as in claim 61, wherein the data are provided in a table, wherein the mechanism constructed and adapted to color an aspect of the data comprises:

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a mechanism constructed and adapted to color backgrounds of table cells according to the rules.

66.   (Previously Presented) A system as in claim 58, wherein the number of groups is fewer than a number of possible data values.

67.   (Currently Amended) A computer-readable memory medium encoded with program data representing a computer program that can cause a computer to implement a method of operating on data, the method comprising:

   providing at least one user-defined grouping rule for grouping numerical data tabulated in a multi-dimensional data set into a user-definable number of groups; and

   applying at least one of the grouping rules to the numerical data;

   wherein the at least one grouping rule defines at least one breakpoint corresponding to the user-definable number of groups, the at least one breakpoint defining numeric ranges of said numerical data, and wherein application of the at least one rule to the numerical data divides the data into groups based on the at least one breakpoint to reduce the resolution of the numerical data wherein the grouping of the data is visualized by associating colors to the data groups tabulated in the multi-dimensional data set.

68.   (Previously Presented) A medium as in claim 67, wherein the data are provided in a table and wherein the at least one grouping rule applies to at least one user-selectable column of the table.

69.   (Previously Presented) A medium as in claim 67, wherein the method further comprises:

   presenting the grouped data in a manner that visually distinguishes the groups.

70.   (Previously Presented) A medium as in claim 69 wherein the grouping rules associate colors with groups and wherein the presenting of the grouped data further comprises:

   coloring an aspect of the data according to the rules.

71. (Previously Presented) A medium as in claim 69, wherein the data are in labeled columns in a spreadsheet, and wherein the at least one grouping rule specifies at least one breakpoint and a corresponding color for each at least one breakpoint, and wherein the presenting of the grouped data comprises:

coloring each data item in the at least one labeled column of the data based on the at least one breakpoint and the corresponding color of the at least one breakpoint.

72. (Previously Presented) A medium as in claim 67, further comprising providing a rule for grouping textual data, the rule defining at least one breakpoint based on textual values.

73. (Previously Presented) A medium as in claim 67, wherein the at least one breakpoint is determined automatically based on the data.

74. (Previously Presented) A medium as in claim 70, wherein the data are provided in a table, wherein the coloring of an aspect of the data comprises:

coloring backgrounds of table cells according to the rules.

75. (Previously Presented) A medium as in claim 67, wherein the number of groups is fewer than a number of possible data values.